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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/758,952	01/11/2001	Ulrich Peuchert	NHL-SCT-19 US	9643

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NILS H. LJUNGMAN & ASSOCIATES
P. O. BOX 130
GREENSBURG, PA 15601-0130

EXAMINER

BOLDEN, ELIZABETH A

ART UNIT	PAPER NUMBER
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1755

17

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AS-17

Office Action Summary

Application No.

09/758,952

Applicant(s)

PEUCHERT ET AL.

Examiner

Elizabeth A. Bolden

Art Unit

1755

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 17,20 and 34-51 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 17,20 and 34-51 is/are rejected.
- 7) ☒ Claim(s) 34,41,42 and 51 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

Art Unit: 1755

DETAILED ACTION

Any rejections and or objections, made in the previous Office Action, and not repeated below, are hereby withdrawn.

The Examiner would like to acknowledge the filing of Amendment "C" on 26, March 2003, Supplemental Amendment "D" on 2 April 2003, and Second Supplemental Amendment "E" filed 6 May 2003. Applicants state that the Second Supplemental Amendment "E" includes all the amendments to the drawings, specification, and claims that were set forth in Amendments "C" and "D". Additionally, Applicants state that all remarks under consideration are set forth in Amendment "E". The Examiner will address the amendments and remarks presented in the Second Supplement Amendment "E" filed 6 May 2003.

Claim Objections

Claims 34, 41, 42, and 51 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

In Claims 34 and 42, the recitation "at least 0.1 % by weight of ZnO" does not further limit the ZnO concentration in the claim from which they depend, Claims 17 and 20, respectively.

Art Unit: 1755

In part (e.) of Claims 41 and 51, the recitation "at least 0.1 % by weight of ZnO" does not further limit the ZnO concentration in the claim from which they depend, Claims 17 and 20, respectively.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 17, 20, and 34-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peuchert et al., U.S. 6,417,124.

Peuchert et al. teach an alkali-free aluminoborosilicate comprising 50-70 wt% SiO₂, 0.5-15 wt% B₂O₃, 10-25 Al₂O₃, 0-10 wt% MgO, 0-10 wt% CaO, 0-12 wt% SrO, 0-15 wt% BaO, 0-10 wt% ZnO, 0-5 wt% ZrO₂, 0-5 wt% TiO₂, 0-2 SnO₂, and 0.05-2 MoO₃. See abstract of Peuchert et al. The reference teaches that the glass can be used as a substrate for thin film transistors, active matrix liquid crystal displays, and plasma addressed liquid crystals. See column 1, lines 6-11. The reference teaches that glasses for the above applications have high thermal shock resistance, high transparency over a broad spectral range (UV and VIS), and a density equal to or lower than 2.6 g/cm³. See column 1, lines 11-16. The reference teaches that the glasses can be produced by the float glass method, which produces streak-free substrates with low surface undulations. See column 1, lines 25-30. The reference teaches that the glasses are

Art Unit: 1755

free from As_2O_3 and Sb_2O_3 . See column 5, lines 41-49. The reference teaches that the T_g is greater than 650 °C. See column 7, line 46. The reference further teaches that the thermal expansion coefficient is from $2.8 \times 10^{-6}/\text{K}$ to $5.0 \times 10^{-6}/\text{K}$. See column 8, lines 43-44.

Peuchert et al. differ from the instant claims by not teaching specific examples that lie within the compositional ranges nor ranges of glass components which are sufficiently specific to anticipate the claim limitations. However, the compositional ranges of Peuchert et al. overlap the compositional ranges of claims 17, 20, and 34-51. Overlapping ranges have been held to establish prima facie obviousness. See MPEP 2144.05.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have selected from the overlapping portion of the ranges of Peuchert et al. because overlapping ranges have been held to establish prima facie obviousness.

Response to Arguments

Applicant's arguments in view of the rejection over Narita et al., see page 57, lines 6-12, filed 6 May 2003, with respect to claims 17-29 have been fully considered and are persuasive. The rejection of claims 17-29 over Narita et al. has been withdrawn. Narita et al. does not teach nor suggest the properties as recited in the instant claims.

Applicant's arguments in view of the rejection over Watzke, see page 57, lines 6-12, filed 6 May 2003, with respect to claims 17-29 have been fully considered and are persuasive. The rejection of claims 17-29 over Narita et al. has been withdrawn. Watzke does not teach nor suggest the properties as recited in the instant claims.

Art Unit: 1755

Applicant's arguments in view of the rejection over Lautenschlager et al. see pages 79-83, filed 6 May 2003, with respect to claims 17-29 have been fully considered and are persuasive. The rejection of claims 17-29 over Lautenschlager et al. has been withdrawn. Lautenschlager et al. disclose that the glass is free of ZnO. See column 6, lines 27-29 of Lautenschlager et al.

Applicant's arguments in view of the rejection over Peuchert et al. filed 6 May 2003 have been fully considered but they are not persuasive.

The examiner acknowledges the Applicants probability arguments in regards to the rejections over Peuchert et al. For example, Applicants argue that based on the glass composition of Peuchert et al. one of ordinary skill in the art has a very low probability of selecting a glass having overlapping ranges especially since the overlap is small especially for BaO and ZnO. This is not found persuasive since Peuchert et al. does teach ranges of compositions, which overlap as well as ranges for properties that overlap. See above rejection. Therefore, Applicant's argument surrounding the probability are acknowledged but are not found persuasive, because the compositional ranges overlap and overlapping ranges have been held to establish *prima facie* obviousness. See MPEP 2144.05.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 1755

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth A. Bolden whose telephone number is 703-305-0124. The examiner can normally be reached on 8:30am to 6:00 pm with alternating Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark L. Bell can be reached on 703-308-3823. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

EAB
July 28, 2003


DAVID SAMPLE
PRIMARY EXAMINER